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### REMARKS

#### Amendments to the claims

Claims 1-15 are pending in the present application. With this response, claims 1, 4, 6, 8, 11, 12, 14, and 15 are being amended. Claim 3 has been canceled. No new matter has been added.

#### 35 USC § 112 rejections

In the Action, the Examiner rejects claims 8-11 under 35 USC § 112, second paragraph. The Applicant has amended claims 8 and 11 as shown, thus overcoming the Examiner's rejection.

#### 35 USC § 102(b) rejections

In the Action, the Examiner rejects claims 1-7, 14 and 15 under 35 USC § 102(b) as being anticipated by U.S. Pat. No. 6,747,529 to Abe. The Applicant respectfully disagrees.

Claim 1 recites "*a piezoelectric film . . . having a crystal orientation predominantly oriented according to a <100> orientation.*"

According to the Examiner, such feature is disclosed in Abe, column 9, lines 10-64. However, Abe discloses a <001> orientation (i.e. vertical see, for example, Figure 6 of the present application), not a <100> orientation. See column 4, lines 23-25 of Abe ('wherein the spontaneous polarization of the epitaxial ferroelectric thin film is uniaxially orientated in (001) azimuth'), column 8, lines 10-11 of Abe ('uniaxially orientated in the film thickness-wise direction') and even claim 1, column 8, lines 61-63 of Abe ('a spontaneous polarization of said epitaxial ferroelectric thin film being uniaxially orientated in a direction normal to a film surface').

It is true that column 9, lines 11-12 talks about a '(100)' direction, however that value has been used by mistake by Abe, as clear to the person skilled in the art

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when reading Abe, also in view of the observations presented in the above paragraph.

Claim 1 further recites "*wherein the piezoelectric film is switchable between a first electrical condition when a first DC voltage difference value is applied to the first and second electrodes, and a second electrical condition when a second DC voltage difference value, different from the first voltage difference value, is applied to the first and second electrodes.*" Such feature has been taken from claim 3 as filed.

In the Action, the Examiner correctly states that Abe does not show such feature. Applicant agrees. However, the Examiner also states that Abe's 'structure would be capable of performing in the hypothetical scenarios proposed by the claimed subject matter.' Applicant respectfully disagrees. If a first DC voltage difference value is applied to Abe, Abe's structure would be permanently polarized, i.e. it would not be switchable, as also explained by Applicant in the introductory portion of the specification of the present application.

Therefore, claim 1 is novel over Abe for at least the above mentioned reasons. Similar consideration apply to independent claims 14 and 15. As to claims 2-7, they directly or indirectly depend on claim 1. Therefore, they are novel over Abe at least in view of such dependency.

**U.S. Pat. No. 6,198,208 to Yano and U.S. Pat. No. 6,300,706 to Grudkowski**

In the Action, the Examiner submits that Yano and Grudkowski are also of interest. The Applicant submits that claims 1-15 as amended are also patentable over Yano and Grudkowski, at least in view of the arguments presented above with reference to Abe. Should the Examiner disagree with the Applicant and believe that Yano and/or Grudkowski are relevant, the Examiner is kindly requested to do so by way of a further non-final Action, in view of the fact that citation of Yano and/or Grudkowski was not made in the context of a 102/103 rejection.

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In view of the above, reconsideration and allowance of all the claims are respectfully solicited.

The Commissioner is authorized to charge any additional fees, which may be required or credit overpayment to deposit account no. 12-0415. In particular, if this response is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136 (a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 12-0415.

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, fax no. (571) 273-8300 on

March 6, 2006  
(Date of Deposit)

Susan Papp  
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Susan Papp  
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03/06/06  
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